

Title (en)

TREATMENT APPARATUS WITH GAS SEPARATION DEVICE LEVEL CONTROLS AND METHODS

Title (de)

BEHANDLUNGSVORRICHTUNG MIT PEGELKONTROLLE EINER GASTRENNVORRICHTUNG UND VERFAHREN

Title (fr)

APPAREIL DE TRAITEMENT AVEC COMMANDES DE NIVEAU DE DISPOSITIF DE SÉPARATION DE GAZ ET PROCÉDÉS

Publication

**EP 3793638 A1 20210324 (EN)**

Application

**EP 19725295 A 20190509**

Priority

- US 201862672718 P 20180517
- US 201862743873 P 20181010
- EP 2019061944 W 20190509

Abstract (en)

[origin: WO2019219504A1] Treatment apparatus with liquid level controls for gas separation devices used to separate gas bubbles from liquids are described herein along with methods of controlling the level of liquids in the gas separation devices. The gas separation devices may be used in liquid treatment apparatus to separate gas bubbles from one or more liquids such as, e.g., physiological liquids (e.g., blood, etc.).

IPC 8 full level

**A61M 1/36** (2006.01)

CPC (source: EP US)

**A61M 1/3627** (2013.01 - EP); **A61M 1/3633** (2013.01 - US); **A61M 2205/07** (2013.01 - EP US); **A61M 2205/3331** (2013.01 - EP US); **A61M 2205/3382** (2013.01 - EP US); **A61M 2205/3386** (2013.01 - EP US)

Citation (search report)

See references of WO 2019219504A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2019219504 A1 20191121**; BR 112020023473 A2 20210330; CN 112135648 A 20201225; CN 112135648 B 20240528; EP 3793638 A1 20210324; EP 3793638 B1 20230201; JP 2021528121 A 20211021; JP 7387644 B2 20231128; US 2021196882 A1 20210701

DOCDB simple family (application)

**EP 2019061944 W 20190509**; BR 112020023473 A 20190509; CN 201980033085 A 20190509; EP 19725295 A 20190509; JP 2020564355 A 20190509; US 201917055268 A 20190509